

IP-COM

Quick Installation Guide

8GE+2SFP Cloud Managed PoE Switch
16GE+2SFP Cloud Managed PoE Switch
24GE+2SFP Cloud Managed PoE Switch

G3310P-8-150W / G3318P-16-250W / G3326P-24-410W

Package contents

- Switch x 1
- Power cord x 1
- Screw (KM3*8 mm) x 8
- Footpad x 4
- L-shaped bracket x 2
- Quick installation guide x 1

This guide instructs how to install, connect and log in to the device. G3326P-24-410W is used as an example for illustration in this guide unless otherwise specified. For details, please download the user guide of the device.

1 Install the device

Preparations

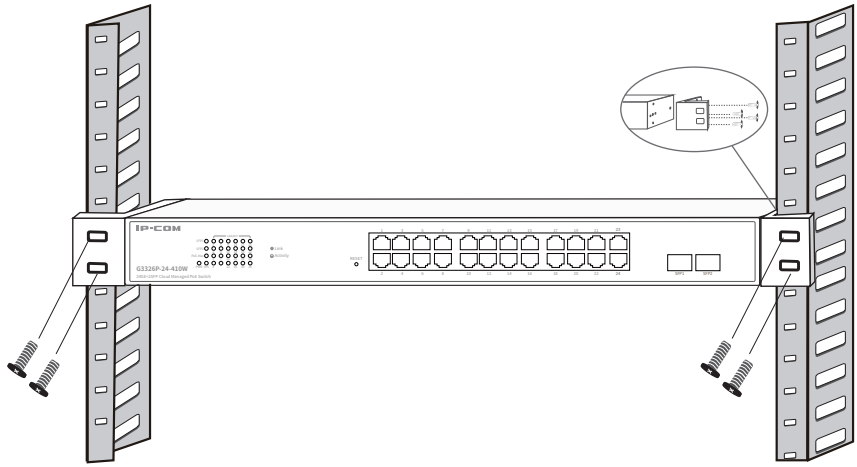
You shall prepare the following tools and materials for device installation.

- Rack mounting: ESD bracelet (or ESD gloves), screwdriver, 4 screws (to secure the switch to the rack)
- Wall mounting: ESD bracelet (or ESD gloves), marker, hammer drill, rubber hammer, screwdriver, spirit level, ladder, 4 expansion bolts (M5*40 mm), 4 screws (PA5*25 mm, head diameter: 10 mm)
- Desktop mounting: ESD bracelet (or ESD gloves)

Installation

Rack mounting (to a standard 19-inch rack)

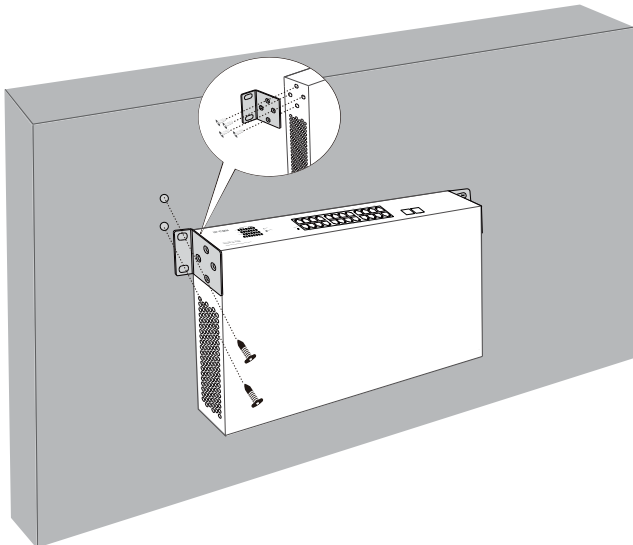
- Step 1** Ensure that the rack is stable and level, and is properly grounded.
- Step 2** Fix the two L-shaped brackets to both sides of the switch using the included screws.
- Step 3** Choose a proper height and fix the L-shaped brackets to the rack using screws (self-prepared). Ensure that the switch is seated securely on the rack.



Wall mounting

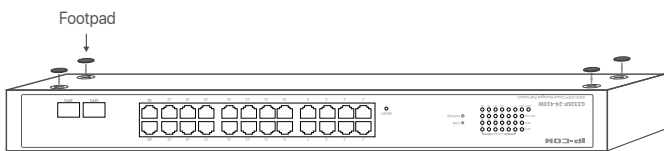
- Note:**
- This switch can only be installed on a concrete or non-flammable wall.
 - Do **NOT** install the switch with its air vents facing downward; otherwise, there will be potential safety hazards.

- Step 1** Rotate the two L-shaped brackets by 90 degrees and fix them to both sides of the switch with the included screws.
- Step 2** Horizontally place the switch onto the wall with its RJ45 ports facing upward. Then mark the screw holes with the marker.
- Step 3** Drill holes in the marked positions, and then knock the expansion bolts (self-prepared, M5*40 mm) into the holes.
- Step 4** Insert the screws (self-prepared, PA5*25 mm, head diameter: 10 mm) through the holes of the two L-shaped brackets, and secure expansion bolts with a screwdriver. Ensure that the switch is installed firmly with its RJ45 ports facing upward.



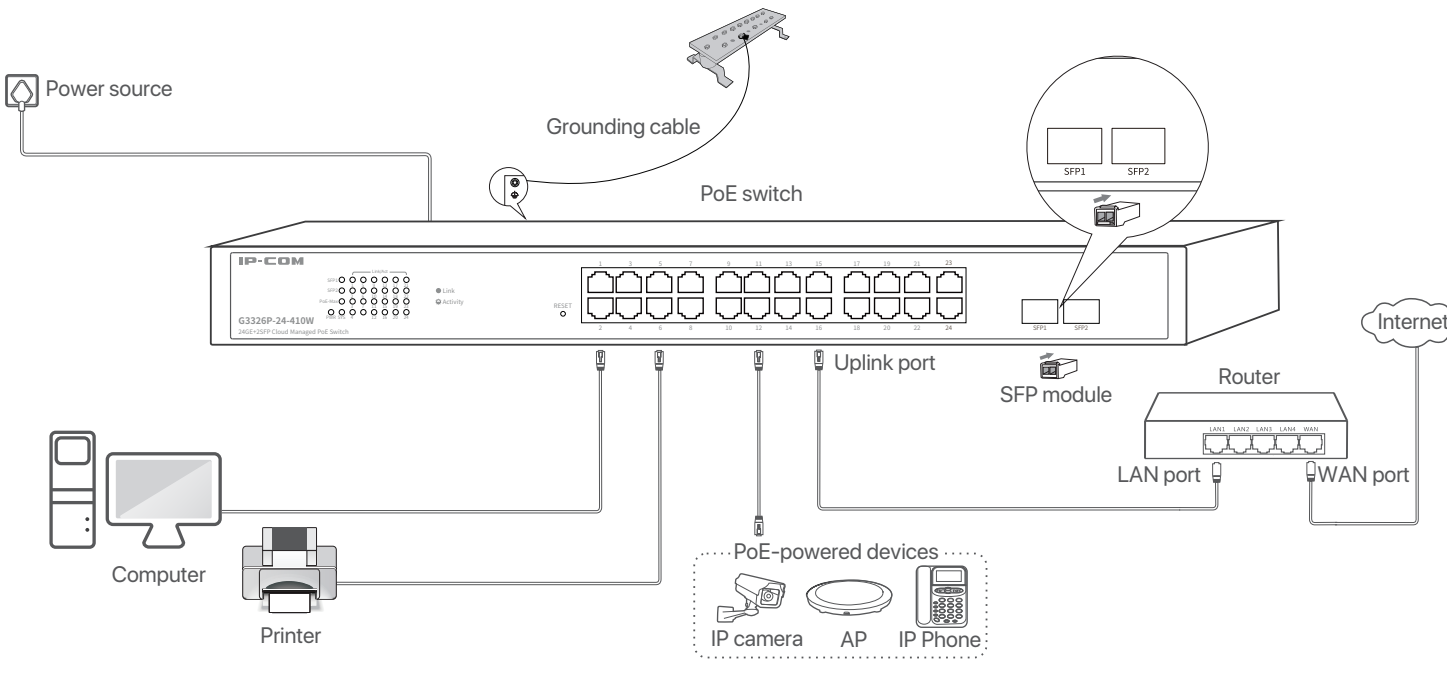
Desktop mounting

Paste the four footpads to the four recesses on the bottom of the switch. Then turn the switch upside down, and place it on a big enough, clean, stable and flat desktop.



2 Connect the device

The typical network topology of the switch series is as shown below.



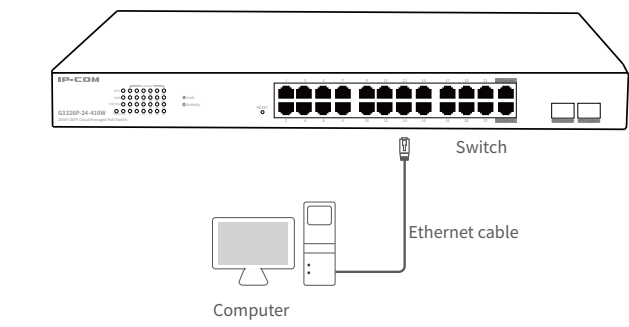
- Note:**
- The switch supports auto MDI/MDIX. You can use either a straight through cable or a crossover cable to connect the switch to Ethernet devices.
 - SFP ports of G3318P-16-250W and G3310P-8-150W are independent ports. For G3326P-24-410W, ports 23 and SFP1 compose a combo port, ports 24 and SFP2 compose a combo port, and SFP ports own higher priority.
 - When the total power consumption of all PoE-powered devices exceeds the maximum output of the switch, the switch cuts the power supply from the port with the largest port number until the total power consumption is less than the maximum output of the switch.

After connection, you can check whether the switch is connected properly according to the following table.

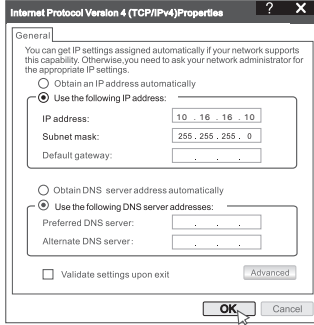
LED indicator	Status	Description
SFP1, SFP2 Link/Act	Solid on	Connected but not active
	Blinking	Active in data transmission
	Off	Not connected or connected improperly
PoE-Max	Solid on	Reach max. PoE budget
	Off	Not reach max. PoE budget
PWR	Solid on	Powered on
	Off	Powered off or powered improperly
SYS	Solid on	System works improperly
	Blinking	System works properly
	Off	System is starting up or works improperly

3 Log in to the device

- Step 1** Use an Ethernet cable to connect the computer to one of the port 1 - 24 of the switch (port 1 - 16 for G3318P-16-250W, port 1 - 8 for G3310P-8-150W).



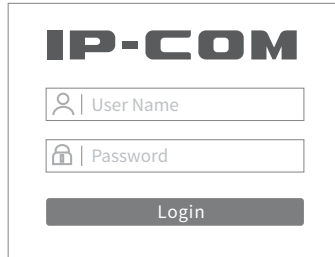
- Step 2** Set the IP address of Ethernet (or Local Area Connection) of the computer to the same network segment of the switch's IP address. The default IP address of the switch is **10.16.16.168**. You can set the IP address of the computer to **10.16.16.X** (X ranges from 2 to 254 excluding 168, and is not occupied) and the subnet mask to **255.255.255.0**.



- Step 3** Start a web browser (such as Chrome) on the computer, enter the management IP address of the switch (default: **10.16.16.168**) in the address bar, and press **Enter** on the keyboard.



- Step 4** Enter the login user name and password (both are **admin** by default) on the login page of the switch, and click **Login**.



- Tips:**
- If you fail to access the above page, please refer to question 1 in **FAQ**.
 - For network security, please change the user name and password after login.

After successfully logging in to the web UI of the switch, you can configure the switch now.

4 IP-COM IMS cloud management

This series of switches support IMS cloud management. You can remotely manage switch on IP-COM IMS Cloud or IP-COM IMS app.

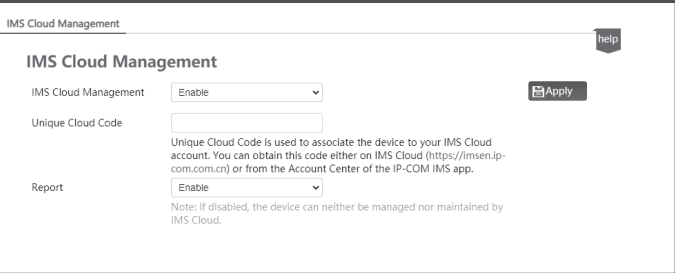
Management on IP-COM IMS Cloud

- Tips**
- Before configuring the IMS Cloud Management function, please ensure that the switch has connected to the internet.

- Step 1** Log in to IP-COM IMS Cloud and obtain Unique Cloud Code.
- 1) On a computer that has connected to the internet, start a web browser, visit <https://imsen.ip-com.com.cn>, and log in to IP-COM IMS Cloud.
- 2) Click the personal avatar at the upper right corner and select **Unique Cloud Code**.
- 3) Click **Copy** to copy the Unique Cloud Code.



- Step 2** Enable the IMS Cloud Management function of the switch.
- 1) Refer to chapter 3 **Log in to the device** to log in to the web UI of the switch.
- 2) Click **Device Management** > **IMS Cloud Management**.
- 3) Enable the **IMS Cloud Management** function, paste the copied **Unique Cloud Code** in the input box, enable the **Report** function, and click **Apply**.



- Step 3** Log in to IMS Cloud and add the switch to project.

- 1) On a computer that has connected to the internet, start a web browser, visit <https://imsen.ip-com.com.cn>, and log in to IP-COM IMS Cloud.
- 2) Click the personal avatar at the upper right corner and select **Device-Joining Alert**.
- 3) Locate this switch and add it to your project.

Done. You can manage and maintain the switch on IMS Cloud.

Management on IP-COM IMS app (app v1.3.1 is used for illustration below)

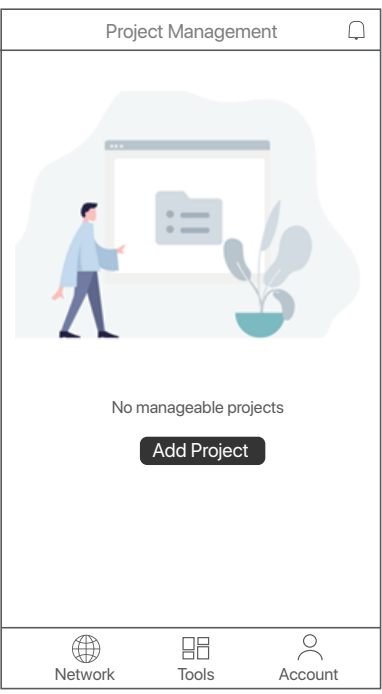
- Step 1** Scan the following QR code or search for the **IP-COM IMS** app in App Store or the app market to download and install the **IP-COM IMS** app on your mobile phone.



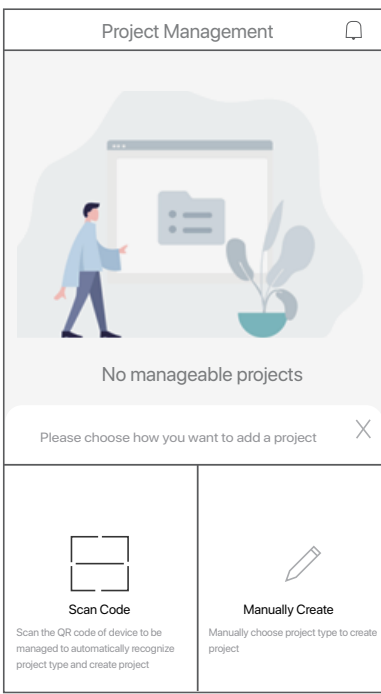
- Step 2** Log in to the IP-COM IMS app. On the **Network** page, add a **Traditional WLAN** project.
- Scan Code (recommended): Scan the **Scan to Add Device** QR code on the Ethernet port surface of the switch to automatically recognize project type and create project.
- Manually Create: Manually choose project type and create project.
- Scan Code** method is used for illustration below.

1) Create project.

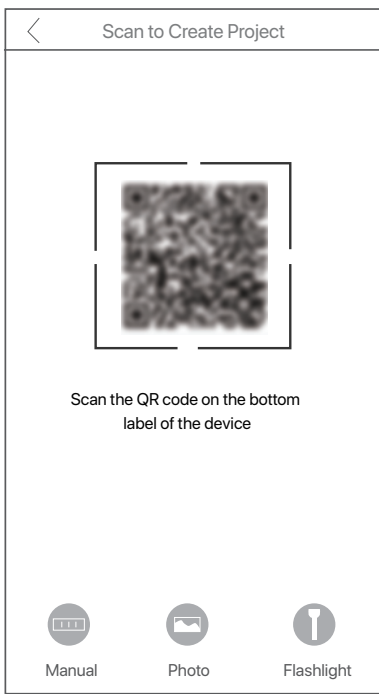
- 1) Click **Add Project**



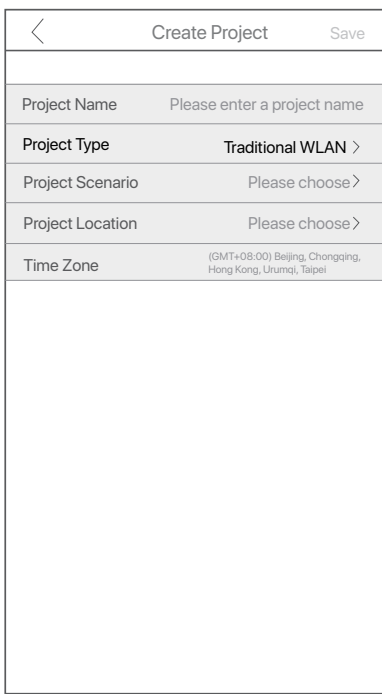
- 2) Click **Scan Code**



- 3) Scan the QR code on the Ethernet port surface



- 4) Project type is automatically recognized

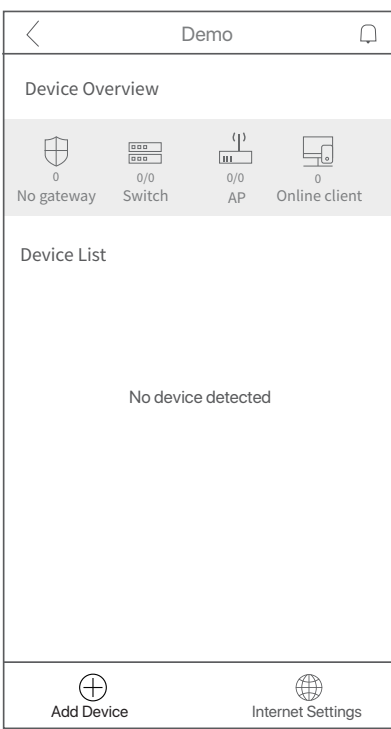


- 5) Set other project parameters and click **Save**

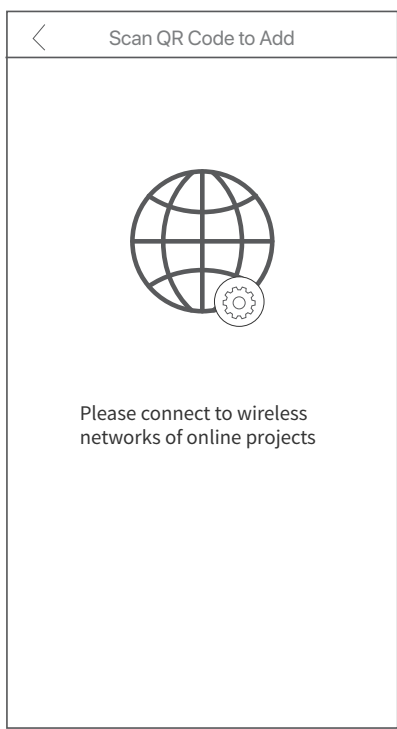


2) Add device.

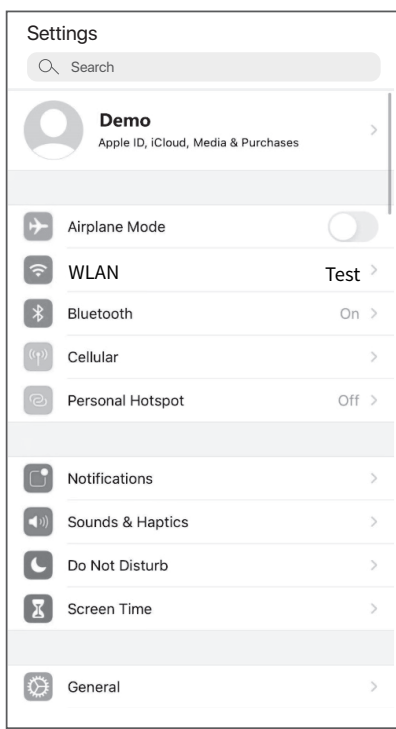
- 1) Enter the project, click **Add Device** in the lower left corner



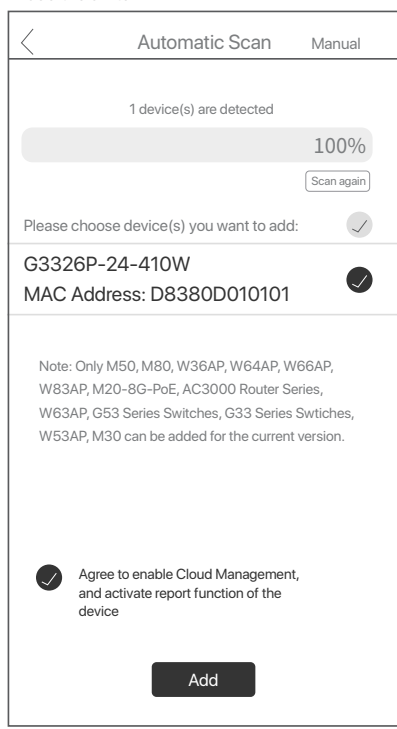
- 2) The following prompt appears



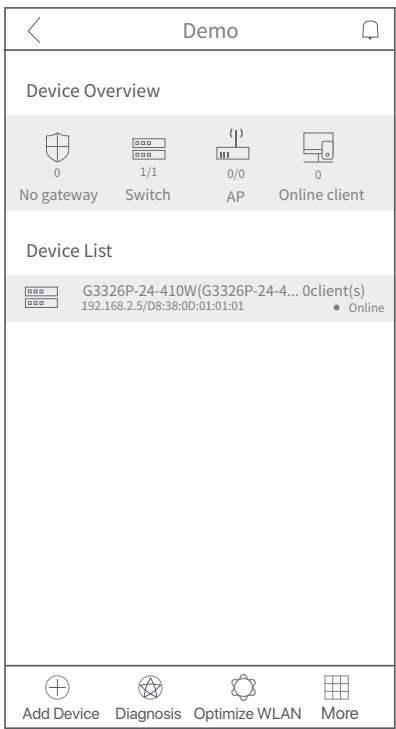
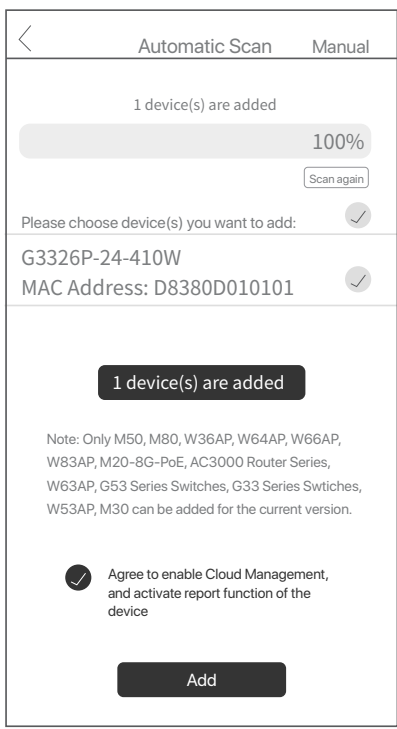
- 3) On the **Settings** page, connect to the WiFi network of the LAN where this switch is deployed (this WiFi network should have internet access)



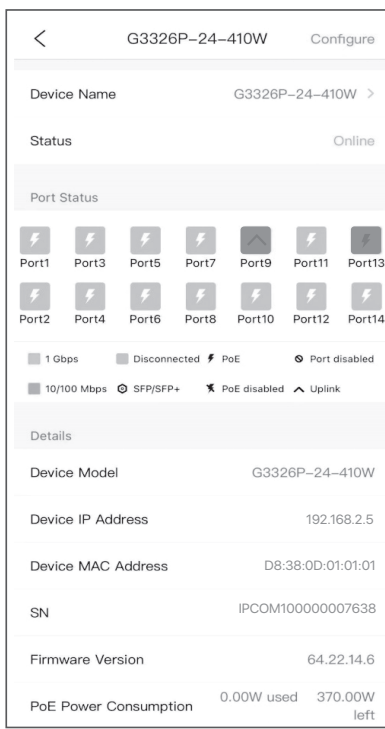
- 4) Go back to the app. Wait until the switch to be added is automatically detected, tick the switch, and tick **Agree to enable Cloud Management, and activate report function of the device** to add the switch



- 5) The switch is added successfully



Done. You can manage and maintain the switch on IP-COM IMS app.



Specifications

Model	G3310P-8-150W		G3318P-16-250W	G3326P-24-410W
Port	10/100/1000 Mbps RJ45 port	8	16	24
	1000 Mbps SFP port	2		
Performance	Switching mode	Store-and-forward		
	MAC address table learning	Auto learning, auto aging		
	MAC address table	8 K		
PoE power supply	PoE standard	IEEE 802.3af, IEEE 802.3at		
	PoE power cable core	8 cores: voltage of cores 1, 2, 4, 5 is +, and cores 3, 6, 7, 8 is -		
	PoE port	1 - 8	1 - 16	1 - 24
	Maximum output power of a single port	30 W		
	Maximum output power of the switch	130 W	230 W	370 W
Dimensions (L x W x H)		294 mm x 179.6 mm x 44 mm	440 mm x 178.8 mm x 44 mm	440 mm x 284 mm x 44 mm
Input voltage		100 - 240V AC, 50/60Hz, 2A	100 - 240V AC, 50/60Hz, 4A	100 - 240V AC, 50/60Hz, 6A
Lightning protection	RJ45 port	Common mode: 6 kV		
	Power supply	Common mode: 6 kV Differential mode: 4 kV		
Operating environment		Temperature: 0°C - 45°C Humidity: (10% - 90%) RH, non-condensing		
Storage environment		Temperature: -40°C - 70°C Humidity: (5% - 90%) RH, non-condensing		
Data transmission rate		Ethernet: 10 Mbps (half duplex)/20 Mbps (full duplex) Fast Ethernet: 100 Mbps (half duplex)/200 Mbps (full duplex) Gigabit Ethernet: 2000 Mbps (full duplex)		
Transmission media		Ethernet: CAT3 or better UTP/STP cable Fast Ethernet: CAT5 or better UTP/STP cable Gigabit Ethernet: CAT5e or CAT6 UTP/STP cable 1000Base-SX: MMF 1000Base-LX: MMF or SMF		
Network standards		IEEE 802.3, IEEE 802.3u, IEEE 802.3x, IEEE 802.3ab, IEEE 802.3af, IEEE 802.3at, IEEE 802.3z		

Specifiche

Modello		G3310P-8-150W	G3318P-16-250W	G3326P-24-410W
Porte	Porta RJ45 10/100/1000 Mbps	8	16	24
	Porta SFP 1000 Mbps	2		
Prestazioni	Modalità switching	Store-and-forward		
	Apprendimento degli indirizzi MAC	Auto invecchiamento, auto apprendimento		
	Tabella degli indirizzi MAC	8 K		
Alimentazione PoE	Standard PoE	IEEE 802.3af, IEEE 802.3at		
	Nucleo del cavo di alimentazione PoE	8 nuclei: la tensione dei nuclei 1, 2, 4, 5 è +; quella dei nuclei 3, 6, 7, 8 è -		
	Porta PoE	1 - 8	1 - 16	1 - 24
	Resa massima di una singola porta	30 W		
	Resa massima dell'interruttore	130 W	230 W	370 W
Dimensioni (L x P x A)		294 mm x 179,6 mm x 44 mm	440 mm x 178,8 mm x 44 mm	440 mm x 284 mm x 44 mm
Tensione di ingresso		100 - 240 V CA, 50/60 Hz, 2A	100 - 240 V CA, 50/60 Hz, 4A	100 - 240 V CA, 50/60 Hz, 6A
Protezione contro i fulmini	Porta RJ45	Modalità comune: 6 kV		
	Alimentazione	Modalità comune: 6 kV Modalità differenziale: 4 kV		
Ambiente operativo		Temperatura: 0°C - 45 °C Umidità: (10% - 90%) UR, senza condensa		
Ambiente di immagazzinaggio		Temperatura: -40°C - 70°C Umidità: (5% - 90%) UR, senza condensa		
Velocità di trasmissione dati		Ethernet: 10 Mbps (half duplex) / 20 Mbps (full duplex) Fast Ethernet: 100 Mbps (half duplex) / 200 Mbps (full duplex) Gigabit Ethernet: 2000 Mbps (full duplex)		
Mezzi di trasmissione		Ethernet: Cavo UTP/STP CAT3 o superiore Fast Ethernet: Cavo UTP/STP CAT5 o superiore Gigabit Ethernet: Cavo UTP/STP CAT5e o CAT6 1000Base-SX: MMF 1000Base-LX: MMF o SMF		
Standard di rete		IEEE 802.3, IEEE 802.3u, IEEE 802.3x, IEEE 802.3ab, IEEE 802.3af, IEEE 802.3at, IEEE 802.3z		

Dane techniczne

Model		G3310P-8-150W	G3318P-16-250W	G3326P-24-410W
Port	Port RJ45 10/100/1000 Mb/s	8	16	24
	Port SFP 1000 Mb/s	2		
Wydajność	Tryb przełączania	Zapis-i-wprzód		
	Nauka adresów MAC	Nauka samodzielną, automatyczne starzenie		
System zasilania PoE	Tabela adresów MAC	8 K		
	Standard PoE	IEEE 802.3af, IEEE 802.3at		
	Rdzeni kabla zasilającego PoE	8 rdzeni: napięcie rdzeni 1, 2, 4, 5 wynosi +, a rdzeni 3, 6, 7, 8 wynosi -		
	Port PoE	1 - 8	1 - 16	1 - 24
	Maksymalna moc wyjściowa pojedynczego portu	30 W		
	Maksymalna moc wyjściowa przełącznika	130 W	230 W	370 W
Wymiary (dł. x szer. x wys.)		294 mm x 179,6 mm x 44 mm	440 mm x 178,8 mm x 44 mm	440 mm x 284 mm x 44 mm
Napięcie wejściowe		100 - 240V AC, 50/60Hz, 2A	100 - 240V AC, 50/60Hz, 4A	100 - 240V AC, 50/60Hz, 6A
Ochrona odgromowa	Port RJ45	Tryb wspólny: 6 kV		
	Zasilanie	Tryb wspólny: 6 kV Tryb różnicowy: 4 kV		
Środowisko pracy		Temperatura: 0°C - 45°C Wilgotność: (10-90%) wilgotności względnej, bez kondensacji		
Środowisko przechowywania		Temperatura: -40°C - 70°C Wilgotność: (5-90%) wilgotności względnej, bez kondensacji		
Szybkość transmisji danych		Sieć Ethernet: 10 Mb/s (półduplex) / 20 Mb/s (pełny duplex) Szybka sieć Ethernet: 100 Mb/s (półduplex) / 200 Mb/s (pełny duplex) Gigabitowa sieć Ethernet: 2000 Mb/s (pełny duplex)		
Środki transmisji	Sieć Ethernet: Kabel CAT3 UTP/STP lub lepszy	Szybka sieć Ethernet: Kabel CAT5 UTP/STP lub lepszy		
	Gigabitowa sieć Ethernet: Kabel CAT5e lub CAT6 UTP/STP	1000Base-SX: MMF 1000Base-LX: MMF lub SMF		
Standardy sieciowe		IEEE 802.3, IEEE 802.3u, IEEE 802.3x, IEEE 802.3ab, IEEE 802.3af, IEEE 802.3at, IEEE 802.3z		

العربية

الطراز	G3310P-8-150W	G3318P-16-250W	G3326P-24-410W	
المشغل	منفذ RJ45 بسرعة 10/100/1000 Mbps	8	16	
	منفذ SFP بسرعة 1000 Mbps	2	24	
	نمط التحويل	تخزين وإعادة توجيه		
	تعلم جدول عناوين MAC	الشبكات المتكاملة ، التعلم التلقائي		
الأداء	MAC عناوين	8 K		
	معايير PoE (الطاقة عبر الإنترنت)	IEEE 802.3af ، IEEE 802.3at		
إمداد الطاقة PoE (الإنترنت)	نواة كابل نقل الطاقة PoE	8، اللون: جهد الألياف 1 و 2 و 5 و 6 بال موجب (+) ، والألياف 3 و 6 و 7 و 8 بالسالب (-)		
الخصائص	الطاقة عبر الإنترنت	1 من 1 إلى 8	1 من 1 إلى 16	1 من 1 إلى 24
	الخصائص القدرة ناتجة من منفذ واحد	30 واط		
الأبعاد (الطول × العرض × الارتفاع)	الخصائص القدرة ناتجة من المحول	130 واط	230 واط	370 واط
	294 مم × 179.6 مم × 44 مم	440 مم × 178.8 مم × 44 مم	440 مم × 284 مم × 44 مم	
جهد الإدخال	100 - 240V ص.ا، 50/60Hz، 2A	100 - 240V ص.ا، 50/60Hz، 4A	100 - 240V ص.ا، 50/60Hz، 6A	
الحماية من البرق	Port RJ45	Mod obnignut: 6 kV		
	Sursa de alimentare	Mod obnignut: 6 kV Mod diferential: 4 kV		
Mediu de functionare	Temperatura: 0°C - 45°C			
	Umiditate: (10% - 90%) umiditate relativă, fără condens			
Mediu de depozitare	Temperatura: -40°C - 70°C			
	Umiditate: (5% - 90%) umiditate relativă, fără condens			
Viteză de transmisie a datelor	Ethernet: 10 Mb/s (semi duplex)/20 Mb/s (duplex complet)			
	Fast Ethernet: 100 Mbps (semi duplex)/200 Mbps (duplex complet)			
Mediu de transmite	Ethernet Gigabit: 2000 Mb/s (duplex complet)			
	Ethernet: Cablu CAT3 UTP/STP sau o versiune mai nouă			
Standard rețea	Fast Ethernet: Cablu CAT5 UTP/STP sau o versiune mai nouă			
	Ethernet Gigabit: CAT5e sau CAT6 UTP/STP			
Standard rețea	1000Base-SX: MMF			
	1000Base-LX: MMF sau SMF			
Mediu de transmite	IEEE 802.3, IEEE 802.3u, IEEE 802.3x, IEEE 802.3ab, IEEE 802.3af, IEEE 802.3at, IEEE 802.3z			
Mediu de transmite	IEEE 802.3z			
Mediu de transmite				

Характеристики

Модель		G3310P-8-150W	G3318P-16-250W	G3326P-24-410W
Порт	Порт RJ45 10/100/1000 Мбит/с	8	16	24
	Порт SFP 1000 Мбит/с	2		
выполнение	Режим переключения	Сохранение и дальнейшая передача		
	Изучение MAC-адресов	Автоматическое старение, автоматическое обучение		
	Таблица MAC-адресов	8 К		
	Стандарт PoE	IEEE 802.3af, IEEE 802.3at		
	Жила силового кабеля PoE	8 жил: напряжение жил 1, 2, 4, 5 — "+", а для жил 3, 6, 7, 8 — "-"		
Эксплуатационные PoE	PoE-порт	1 – 8	1 – 16	1 – 24
	Максимальная выходная мощность одного порта	30 Вт		
	Максимальная выходная мощность коммутатора	130 Вт	230 Вт	370 Вт
	Размеры (Д x Ш x В)	294 мм x 179,6 мм x 44 мм	440 мм x 178,8 мм x 44 мм	440 мм x 284 мм x 44 мм
Входное напряжение	100–240 В перемен. тока, 50/60 Гц, 2А	100–240 В перемен. тока, 50/60 Гц, 4А	100–240 В перемен. тока, 50/60 Гц, 6А	
Молниезащита	Порт RJ45	Обычный режим: 6 кВ		
	Источник питания	Обычный режим: 6 кВ Дифференциальный режим: 4 кВ		
Рабочая среда		Температура: 0°С – 45°С Влажность: (10–90%) без конденсации		
Условия хранения		Температура: –40°С – 70°С Влажность: (5–90%) без конденсации		
Скорость передачи информации		Ethernet: 10 Мбит/с (полудуплексный)/20 Мбит/с (полнодуплексный) Fast Ethernet: 100 Мбит/с (полудуплексный)/200 Мбит/с (полнодуплексный) Гигабитный Ethernet: 2000 Мбит/с (полнодуплексный)		
Средства передачи		Ethernet: Кабель CAT3 UTP/STP или выше Fast Ethernet: Кабель CAT5 UTP/STP или выше Гигабитный Ethernet: Кабель CAT5e или CAT6 UTP/STP		
		1000Base-SX: MMF 1000Base-LX: MMF или SMF		
Стандарты сети		IEEE 802.3, IEEE 802.3u, IEEE 802.3x, IEEE 802.3ab, IEEE 802.3af, IEEE 802.3at, IEEE 802.3z		

Especificações

Modelo		G3310P-8-150W	G3318P-16-250W	G3326P-24-410W
Porta	Porta RJ45 10/100/1000 Mbps	8	16	24
	Porta SFP 1000 Mbps	2		
Desempenho	Modo de comutação	Guardar e reencaminhar		
	Aprendizagem de endereços MAC	Envelhecimento automático, aprendizagem automática		
	Tabela de endereços MAC	8 K		
Fonte de alimentação PoE	Norma PoE	IEEE 802.3af, IEEE 802.3at		
	Núcleo de cabo de energia PoE	8 núcleos: a tensão dos núcleos 1, 2, 4, 5 é superior e a dos núcleos 3, 6, 7, 8 é -		
	Porta de PoE	1 - 8	1 - 16	1 - 24
	Saída máxima de uma única porta	30 W		
	Saída máxima do comutador	130 W	230 W	370 W
Dimensões (C x L x A)		294 mm x 179,6 mm x 44 mm	440 mm x 178,8 mm x 44 mm	440 mm x 284 mm x 44 mm
Tensão de entrada		100-240V AC, 50/60Hz, 2 A	100-240V AC, 50/60Hz, 4 A	100-240V AC, 50/60Hz, 6 A
Proteção contra raios	Porta RJ45	Modo comum: 6 kV		
	Fonte de energia	Modo comum: 6 kV Modo diferencial: 4 kV		
Ambiente operacional		Temperatura: 0°C - 45°C Humidade: (10% - 90%) de HR, sem condensação		
Ambiente de armazenamento		Temperatura: -40°C - 70°C Humidade: (5% - 90%) de HR, sem condensação		
Taxa de transmissão de dados		Ethernet: 10 Mbps (half duplex)/20 Mbps (full duplex) Ethernet rápida: 100 Mbps (half duplex)/200 Mbps (full duplex) Gigabit Ethernet: 2000 Mbps (full duplex)		
Meios de transmissão		Ethernet: Cabo CAT3 UTP/STP ou superior Ethernet rápida: Cabo CAT5 UTP/STP ou superior Gigabit Ethernet: Cabo CAT5e ou CAT6 UTP/STP 1000Base-SX: MMF 1000Base-LX: MMF ou SMF		
Padrões de rede		IEEE 802.3, IEEE 802.3u, IEEE 802.3x, IEEE 802.3ab, IEEE 802.3af, IEEE 802.3at, IEEE 802.3z		

Specificații

Model		G3310P-8-150W	G3318P-16-250W	G3326P-24-410W
Port	Port RJ45 10/100/1000 Mbps	8	16	24
	Port SFP 1000 Mbps	2		
Performanță	Switching mode	Store-and-forward		
	MAC address table learning	Auto learning, auto aging		
	MAC address table	8 K		
Alimentare PoE	PoE standard	IEEE 802.3af, IEEE 802.3at		
	Conducător cablu de alimentare PoE	8 conductori: tensiunea conductorilor 1, 2, 4, 5 este +, iar a conductorilor 3, 6, 7, 8 este -.		
	Port PoE	1 - 8	1 - 16	1 - 24
	Putere maximă per port	30 W		
	Putere maximă totală a switch-ului	130 W	230 W	370 W
Dimensiuni (L x l x Î)		294 x 179,6 x 44 mm	440 x 178,8 x 44 mm	440 x 284 x 44 mm
Tensiune de intrare		100 - 240 V c.a., 50/60 Hz, 2 A	100 - 240 V c.a., 50/60 Hz, 4 A	100 - 240 V c.a., 50/60 Hz, 6 A
Protecție împotriva descărcărilor electrice	Port RJ45	Mod obținut: 6 KV		
	Sursa de alimentare	Mod obținut: 6 KV Mod diferențial: 4 KV		
Mediu de funcționare		Temperatură: 0°C - 45°C Umiditate: 10% - 90% umiditate relativă, fără condens		
Mediu de depozitare		Temperatură: -40°C - 70°C Umiditate: 5% - 90% umiditate relativă, fără condens		
Viteză de transmisie a datelor		Ethernet: 10 Mbps (semi duplex)/20 Mbps (duplex complet) Fast Ethernet: 100 Mbps (semi duplex)/200 Mbps (duplex complet) Ethernet Gigabit: 2000 Mbps (duplex complet)		
Mediu de transmitere		Ethernet: Cablu CAT3 UTP/STP sau o versiune mai nouă Fast Ethernet: Cablu CAT5 UTP/STP sau o versiune mai nouă Ethernet Gigabit: CAT5e sau CAT6 UTP/STP 1000Base-SX: MMF 1000Base-LX: MMF sau SMF		
Standard rețea		IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3af, IEEE 802.3at, IEEE 802.3z		